

DOCUMENT RESUME

ED 315 471

UD 027 232

AUTHOR White, Sammis B.; Rue, Richard C.
TITLE Fiscal Accountability in Wisconsin's Public
Elementary Schools. "Where Does the Money Go?" Volume
2, No. 1.
INSTITUTION Wisconsin Policy Research Inst., Milwaukee.
PUB DATE Jan 89
NOTE 31p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Case Studies; Educational Finance; Elementary
Education; *Elementary School Teachers; *Money
Management; *Public Schools; Questionnaires;
*Resource Allocation; School Districts; *School
District Spending; *State Norms; State Surveys;
*Teacher Salaries
IDENTIFIERS *Wisconsin

ABSTRACT

An average of 33.5 percent of school district expenditures is spent on classroom teachers' compensation in Wisconsin elementary schools. The range varies from a low of 21.4 percent to a high of 45.9 percent. Financial data were analyzed from the survey responses of 110 of Wisconsin's 431 districts. The reasons for the average proportion spent on teachers and the great differences among districts are not clear. Substantial variations across districts in costs per pupil, number of pupils per classroom, and average teacher compensation each play a role, but there is no consistent pattern among them. Districts have made choices in each variable that affect the outcome, but the districts are unlikely to have considered these allocation decisions with the classroom teacher in mind. The amount spent on classroom teachers is a fundamental question for parents, citizens, and school districts. Therefore, the State Department of Public Instruction (DPI) should collect and analyze such financial data on a regular basis and develop a modified reporting form so that citizens in each district can better understand where specifically money is spent and why the relative expenditures in a given district vary from those of other districts. Two case studies illustrate the detailed expenditure differences between Shorewood, a suburban Milwaukee district, and Fall River, a small rural district. Statistical data are included on one map, three graphs, and nine tables. Technical notes on the survey instrument and data collection, a copy of the survey questionnaire, and a list of 13 references are appended. (FMW)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED315471

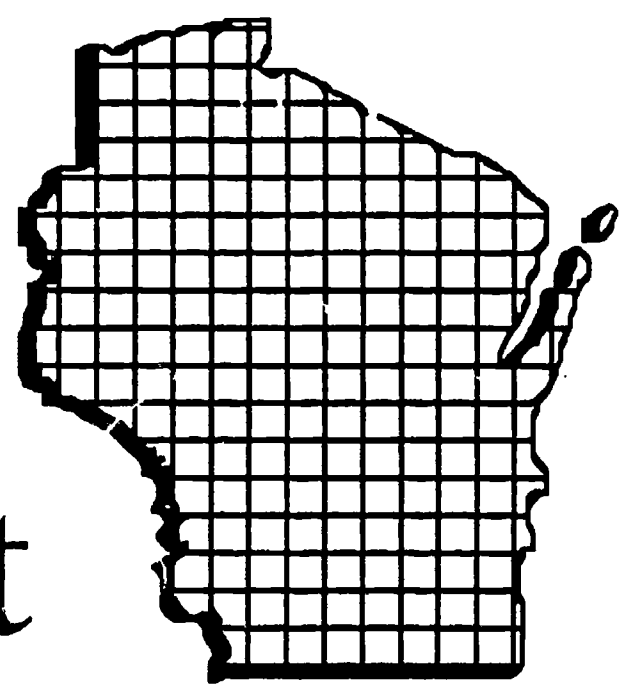
1/16/90

Wisconsin=

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☒ This document has been reproduced as
received from the person or organization
originating it
☐ Minor changes have been made to improve
reproduction quality
• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
James Miller
WI Policy Research
Inst.
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Policy Research Institute Report



January 1989

Volume 2, No. 1

FISCAL ACCOUNTABILITY in WISCONSIN'S PUBLIC ELEMENTARY SCHOOLS

"WHERE DOES THE MONEY GO?"

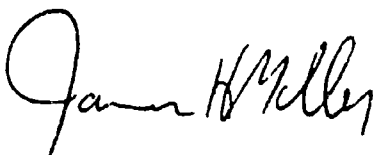
11D 027 232

Report from the Executive Director:

Accountability is becoming one of the top issues in American education. While it has no specific definition, we believe accountability in education starts with the premise, "where does the money go?" In Wisconsin, billions of dollars are spent on public elementary and secondary schools. Yet in many instances we really don't know how the money is spent. The purpose of this study is to begin to supply data on where the money goes at the elementary level in Wisconsin schools. We are not making judgements whether the money is spent wisely or not, nor do we draw conclusions from the data that we obtained from the study in terms of judging school performance. The reality is that at the local level, legislators and taxpayers are in the best position to make judgements on how their schools perform. However, to do this they need information that explains exactly what is going on in the schools.

This study took well over a year and was designed by Richard Rue who has extensive research experience in Wisconsin. Rue was the Research Director of Governmental Affairs at the Metropolitan Milwaukee Association of Commerce and earlier served as a Public Policy Analyst for the Public Expenditure Survey of Wisconsin. There he was responsible for compiling school district data including expenditure, revenue, and staffing trends in Wisconsin.

Professor Sammis White, Director of the Urban Research Center at the University of Wisconsin-Milwaukee, was also involved in analyzing the data and writing the report. The data in this report come from three different sources: the Department of Public Instruction, the Wisconsin Association of School Boards, Inc., and the school districts themselves. In putting this data together, we received help from Dr. Herbert Grover, State Superintendent of Education and George Tipler, Executive Director of the Wisconsin Association of School Boards. They wrote supporting letters which were mailed to every school district in the state along with a questionnaire, which allowed us to obtain a reasonable sample from around the state. We wish to also thank the school districts that participated and hope that this report allows institutions such as the Department of Public Instruction to shape their data supporting system in such a way as to allow the average Wisconsin taxpayer and their elected officials to understand exactly how their tax dollars are spent by public schools in Wisconsin.



JAMES H. MILLER

**THE WISCONSIN POLICY
RESEARCH INSTITUTE**
3107 North Shepard Avenue • Milwaukee, WI 53211
(414) 963-0600

FISCAL ACCOUNTABILITY in WISCONSIN'S PUBLIC ELEMENTARY SCHOOLS

"WHERE DOES THE MONEY GO?"

TABLE OF CONTENTS

Executive Summary	1
Introduction	2
Methodology & Data	3
Geographic Representation	7
Cost Per-Pupil	9
Teacher Compensation as Percentage of Classroom Cost	11
Differing Expenditure Patterns	14
Case Studies	15
Appendix I	20
Footnotes	22

BOARD OF DIRECTORS

SHELDON LUBAR, CHAIRMAN

HAL KUEHL

ROBERT BUCHANAN

REED COLEMAN

ALLEN TAYLOR

JAMES ERICSON

JAMES MILLER, EXECUTIVE DIRECTOR

FISCAL ACCOUNTABILITY

in

**WISCONSIN'S PUBLIC
ELEMENTARY SCHOOLS**

"WHERE DOES THE MONEY GO?"

by

SAMMIS B. WHITE, PH.D.

and

RICHARD C. RUE

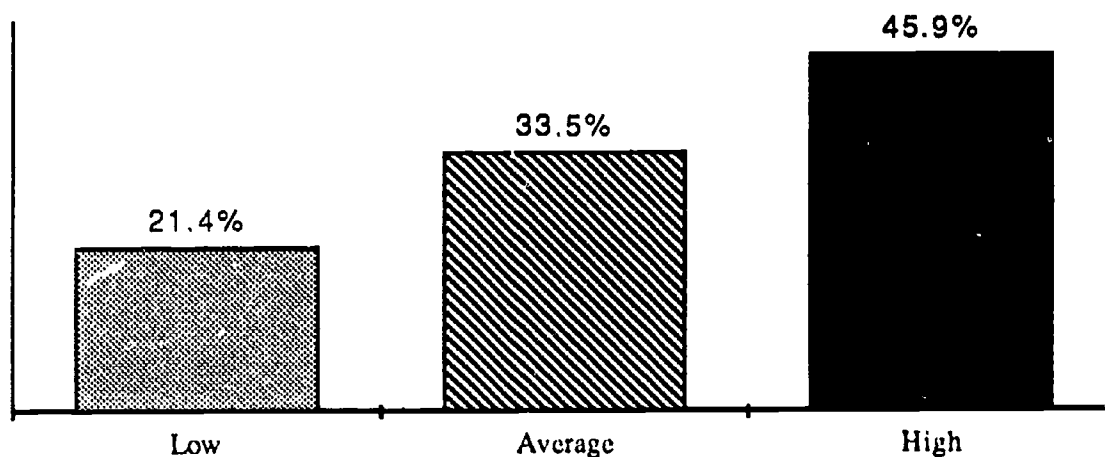
EXECUTIVE SUMMARY

There is an old adage that education begins when the teacher closes the door. The implication is that it is the classroom teacher who is primarily responsible for the education which students receive. If you believe this to be the case, as many do, then a fundamental question for parents, citizens and school districts today is how much of the money spent on education goes to this key person, the classroom teacher. Unfortunately, it is very difficult at this point in time in most districts in Wisconsin to determine an answer to this question.

This report, however, attempts to answer this question for a sample of 110 school districts in the State of Wisconsin. It does so only after an extensive data collection and analysis, an analysis the authors think should be done on a regular basis by the districts and the state Department of Public Instruction (DPI). The DPI annually collects a great deal of data from all 431 districts. The reporting form should be modified so that citizens in each district can better understand where specifically the dollars are going and why the relative expenditures in a given district vary from those in other districts.

The answer to the question of what percentage of district expenditures goes to the classroom teacher is 33.5%, on average, for the elementary schools in our 110-district sample. The range varies from a low of 21.4% to a high of 45.9%.

Teacher Compensation Percentage of Classroom Expenditure
1987-88



Source: Wisconsin Policy Research Institute

Why the average is what it is and why the differences among districts are so great is not entirely clear. There is substantial variation across districts in costs per pupil, number of pupils per classroom, and average teacher compensation. These each play a role. But there is no consistent pattern among them. Districts may, for example, have very similar ratios of teacher compensation to classroom expenditures but have very different pay schedules, classroom sizes, or cost per pupil. Districts have made choices in each variable which affect the outcome, but the districts are unlikely to have thought through these allocation decisions with the issue of how much goes to the classroom teacher in mind. The information has not been available in a format which would allow it.

There is no one prescribed way to educate our children, nor is there one correct allocation of expenditures to the classroom teacher. But by not having information on the ways our monies are being expended, Wisconsin's citizens are not able to make informed choices on better ways to educate our children.

INTRODUCTION

The provision of public education in Wisconsin constitutes the largest programmatic expenditure of state and local government revenues. The costs of Wisconsin's primary, secondary, vocational, university, and extension systems consistently require over 50 percent of total state and local government expenditures. (1) Given this scale of expenditure and considerable public concern as to the educational results, it is not surprising that calls for further increases in support for education are met with some skepticism. The persistent fundamental questions are, where is our money going and what are the educational results? Unfortunately, answers to these questions are not clear.

At the local school district level, where in 1987-88 some \$3.5 billion was expended, attempts have been made, through the institution of a mandatory reporting system to the Wisconsin Department of Public Instruction, to break out in considerable detail the source of revenues and the allocation of expenditures. (2) All of Wisconsin's 431 school districts report similar information which allows comparisons among districts to be made on the basis of aggregate budget or per-pupil expenditures. The data really do not, however, give citizens insight into how many dollars are actually going into classrooms. The most important activity of each school district in the state is placing teachers in a classroom and providing them with the necessary tools for educating Wisconsin's children. The data now available to Wisconsin citizens and public policy decision-makers do not tell us what resources are spent in a classroom in Wisconsin. The data also do not provide any insight into how many dollars are actually spent on the teacher in each classroom. Nor do the data allow for the evaluation of various initiatives or programs. Districts, for example, cannot easily tell why their per-pupil expenditures are higher or lower than other districts and whether the differences are meaningful. The data are too aggregated, misaggregated, or are not appropriate for a more insightful evaluation of expenditures.

Since the level of expenditure is so great, and since the educational outcome is so important to the future of the State, Wisconsin citizens should be given a much clearer idea of where education dollars are actually being spent. This is not to say that monies are currently being misspent. That cannot be fully determined. What must be done, however, is to reformat the data that are collected so that citizens can better know where the dollars are being spent and can hold their districts more accountable for their performance. It is not sufficient to know that a district spends \$4,500 per pupil per year. The citizens should know how much of that money goes to the basic classroom teacher, to ancillary teachers, to administration, specific educational programs, and to a host of other categories.

This report makes a first attempt at allocating the percentage of a district's budget which actually goes to the classroom teacher. The prevailing wisdom is that the vast majority of the average district's budget goes to instruction. But only a portion of this majority actually goes to the basic classroom teacher. Other portions go to supporting teachers, aids, remedial help, special programs, and the like. The first question is how much goes to the basic teacher. The next question is what is the allocation among the others. At this juncture an attempt is made to answer only the first question. The results should spur others to want to answer the second question as well.

Data collected in this study indicate that the compensation package for the classroom teacher requires between 21.4 to 45.9 percent of classroom expenditures, depending on the district. The range is relatively dramatic. The average for the 110 responding districts in the sample is 33.5%. This is decidedly lower than the "vast majority" generally cited by conventional wisdom. The question of where do the other two out of three dollars spent on primary education in Wisconsin go comes immediately to mind. At present neither the Department of Public Instruction nor most individual districts provide sufficient data to answer the question.

METHODOLOGY

Since DPI data are not currently available to answer the question of what proportion of spending goes to the classroom teacher, data had to be collected from individual buildings as well as from the DPI and the Wisconsin Association of School Boards. A survey instrument was designed and sent to the school district administrators or business managers in each of the 431 school districts.

- The basic question it sought to answer is how many pupils are there in each classroom in each district. In the spring of 1988 the district administrators/managers were asked to distribute the survey instrument to the more than 2,000 principals who administer schools in Wisconsin. Principals from over 200 districts responded. A number of districts, however, did not have enough of the buildings (at least one-half) respond to have the district data included in this report. In the majority of districts reported upon below, however, all of the elementary buildings in the district reported.

An initial attempt was made to collect these data for both primary and secondary levels. But due to the greater variety of class scheduling patterns and a lower percentage of returns from middle and high schools, this study concerns only elementary school buildings (see technical note).

"Elementary" school includes different grades depending on the district. For some it is kindergarten through grade five; for others it extends to grade six or grade eight. All districts with complete enough responses, regardless of definition, are included.

<u>Grade Levels Included*</u>	<u>Number of Districts</u>
k-3	1
k-4	9
k-5	26
k-6	55
k-8	17
Portion of k-12 Building	<u>2</u>
	110

*k = Kindergarten

THE DATA

Appearing collectively in Table I are all of the data collected and analyzed for this study. The data appear for the 110 districts with at least half of their elementary schools reporting. The districts are listed by tens based on their ranking in the last column, the percentage of classroom expenditures that goes to the classroom teacher.

The first column is a computation of the average number of students per classroom derived from the survey data reported by the principals in each district reporting. This figure was computed by dividing the number of pupils reported in the building by the number of classrooms operated in the building, and then averaging across buildings in districts with more than one elementary school.

The second column, expenditures per pupil, is taken from a DPI report for all districts. (3) The DPI collects data on revenues, expenditures and staffing. It then creates common comparison measures such as this one, computed by dividing total expenditures by total full time equivalent students.

**TABLE I
SUMMARY TABLE**

**Factors in the Computation of Teacher Compensation
as a Percentage of Classroom Expenditures,
Wisconsin Sample Districts, 1987-88**

School District (grades)	Pupils Per Classroom		Expenditures Per Pupil		Expenditures Per Classroom		Teacher's Compensation			
	Number	Rank	Amount	Rank	Amount	Rank	Amount	Rank	% Classroom S	Rank
West Bend (k-6)	19.0	102	\$4,726	57	\$89,652	95	\$41,179	22	45.9	1
Brillion (k-6)	20.9	80	3,716	108	77,590	105	34,393	72	44.3	2
Howard Suamico (k-5)	20.8	82	4,060	102	84,529	101	37,240	46	44.1	3
Kohler (k-6)	17.7	107	5,385	21	95,530	86	41,162	23	43.1	4
Oakfield (k-6)	17.2	108	4,854	48	83,343	103	35,639	61	42.8	5
Sturgeon Bay (k-5)	19.2	98	4,415	79	84,636	100	35,451	62	41.9	6
Westby (k-5)	20.2	85	4,201	95	84,944	99	35,059	66	41.3	7
Maple (k-5)	18.4	105	4,964	39	91,387	93	37,563	43	41.1	8
New London (k-6)	20.9	81	4,332	85	90,452	94	36,965	48	40.9	9
Cudahy (k-6)	20.6	84	5,177	31	106,853	58	43,526	10	40.7	10
Burlington (k-5)	25.5	12	3,949	106	100,621	73	40,462	27	40.2	11
Wisconsin Dells (k-6)	18.0	106	4,486	73	80,838	108	32,279	93	39.9	12
Elk Mound (k-6)	19.9	91	4,205	94	83,595	102	33,241	87	39.8	13
Deromark (k-6)	27.2	5	3,230	110	87,791	97	34,842	68	39.7	14
New Holstein (k-8)	23.1	45	4,154	100	96,124	83	37,967	40	39.5	15
Antigo (k-6)	20.1	87	4,636	64	92,998	90	36,522	53	39.3	16
Reedsburg (k-6)	19.5	95	4,464	74	86,914	98	34,097	73	39.2	17
Elroy (k-8)	19.7	93	4,190	97	82,334	106	32,285	92	39.2	18
Neenah (k-6)	24.8	20	4,670	60	115,583	33	44,991	3	38.9	19
Lake Geneva J1 (k-6)*	21.1	77	4,576	69	96,508	80	37,512	44	38.9	20
Plymouth (k-5)	22.6	55	4,162	99	93,895	87	36,448	54	38.8	21
Wausau (k-6)	23.3	41	4,523	71	105,431	61	40,498	26	38.4	22
Richland (k-6)	17.1	109	4,847	50	82,738	104	31,567	98	38.2	23
Ellsworth (k-6)	23.0	48	4,078	101	93,631	88	35,692	60	38.1	24
Mequon (k-5)	21.9	67	5,227	28	114,576	36	43,557	7	38.0	25
Janesville (k-6)	23.6	35	4,587	68	108,345	54	41,138	24	38.0	26
Cedarburg (k-4)	21.1	78	5,217	29	110,021	47	41,593	19	37.8	27
Port Washington (k-4)	19.7	92	5,573	15	109,621	49	41,488	20	37.8	28
Monona Grove (k-5)	19.9	90	5,539	18	110,171	46	41,401	21	37.6	29
Three Lakes (k-8)	19.3	97	5,087	34	98,383	77	36,834	51	37.4	30
Rib Lake (k-5)	19.1	99	4,046	104	77,400	110	28,881	105	37.3	31
South Milwaukee (k-6)	23.1	46	4,859	46	112,291	40	41,815	17	37.2	32
Kewaskum (k-5)	22.8	52	4,343	84	98,977	76	36,650	52	37.0	33
Kaukauna (k-8)	25.2	14	4,423	77	111,548	41	41,018	25	36.8	34
Whitewater (k-6)	22.5	56	4,618	65	104,090	66	38,191	38	36.7	35
Neloosa (k-4)	23.4	39	4,488	72	105,109	63	38,429	36	36.6	36
Niagara (k-6)	19.6	94	5,544	17	108,662	52	39,509	29	36.4	37
West Allis (k-6)	22.3	60	5,598	14	124,611	19	45,284	2	36.3	38
Baraboo (k-6)	22.1	64	4,193	96	92,498	92	33,466	80	36.2	39
Oak Creek (k-6)	24.4	24	4,891	45	119,340	24	43,044	11	36.1	40

School District (grades)	Pupils Per Classroom		Expenditures Per Pupil				Teacher's Compensation			
	Number	Rank	Amount	Rank	Amount	Rank	Amount	Rank	% Classroom \$	Rank
Westfield (k-8)	21.7	70	\$4,271	91	\$92,723	91	\$33,463	81	36.1	41
Reedsville (k-6)	23.8	29	3,698	109	88,123	96	31,833	96	36.1	42
Watertown (k-6)	23.5	37	4,914	44	115,577	34	41,606	18	36.0	43
Little Chute (k-8)	24.5	22	4,326	87	106,160	59	38,266	37	36.0	44
Wisconsin Rapids (k-6)	21.9	68	4,843	51	105,868	60	37,981	39	35.9	45
Rice Lake (k-5)	24.8	19	4,057	103	100,451	74	36,039	56	35.9	46
Pardeeville (k-6)	21.3	75	4,379	82	93,316	89	33,258	86	35.6	47
Kenosha (k-6)	23.9	28	4,659	62	111,210	43	39,248	30	35.3	48
Mondovi (k-8)	22.3	58	4,810	54	107,455	56	37,907	42	35.3	49
Maple Dale-Indian (k-8)*	20.1	86	6,190	5	124,171	21	43,555	9	35.1	50
Eau Claire (k-6)	24.5	23	4,596	67	112,556	38	39,528	28	35.1	51
Cedar Grove (k-6)	22.3	59	4,926	42	109,850	48	38,573	35	35.1	52
Shorewood (k-6)	21.4	72	5,734	9	122,708	22	42,938	13	35.0	53
Amery (k-4)	24.8	18	4,244	93	105,166	62	36,845	49	35.0	54
Sheboygan Falls (k-6)	24.6	21	4,189	98	103,133	69	36,129	55	35.0	55
Stevens Point (k-6)	25.1	15	4,429	76	110,946	44	38,769	32	34.9	56
Marion (k-6)	23.6	34	4,045	105	95,624	84	33,330	85	34.9	57
Milton (k-5)	23.5	36	4,323	88	101,763	72	35,368	63	34.8	58
Belmont (k-6)	19.0	100	4,330	86	82,443	105	28,673	107	34.8	59
Menomonee Falls (k-5)	22.8	53	5,654	11	128,798	15	44,648	5	34.7	60
Hurley(k-6)	20.0	88	5,561	16	111,442	42	38,583	34	34.6	61
Rhineland (k-5)	22.2	62	4,841	52	107,373	57	36,839	50	34.3	62
Columbus (k-8)	22.2	61	4,720	59	104,878	64	35,921	57	34.3	63
Brodhead (k-4)	22.5	57	4,400	80	99,132	75	33,950	77	34.2	64
Portage (k-6)	22.0	65	4,390	81	96,624	79	32,863	88	34.0	65
Cumberland (k-6)	21.6	71	4,786	55	103,425	68	35,072	65	33.9	66
Wauwatosa (k-6)	23.2	43	5,671	10	131,567	12	44,424	6	33.8	67
Fox Point J8 (k-8)*	18.7	103	6,886	3	128,768	16	43,555	8	33.8	68
Glendale J1(k-5)*	23.7	33	5,617	13	133,291	10	44,893	4	33.7	69
Winneconne (k-5)	23.8	30	4,314	89	102,803	71	34,657	70	33.7	70
Whitefish Bay (k-8)	22.0	66	5,765	7	126,599	18	42,226	16	33.4	71
Elmbrook (k-6)	21.3	73	6,459	4	137,835	6	45,763	1	33.2	72
Hortonville (k-8)	25.4	13	3,793	107	96,380	81	32,005	95	33.2	73
Weyerhaeuser (k-12 Bldg)	13.4	110	6,139	6	82,324	107	27,369	108	33.2	74
Chippewa Falls (k-5)	26.6	7	4,254	92	113,114	37	37,439	45	33.1	75
Greenfield (k-6)	23.9	27	5,364	22	128,092	17	42,302	15	33.0	76
Racine (k-5)	24.9	17	4,765	56	118,553	26	39,158	31	33.0	77
Fort Atkinson (k-6)	20.8	83	5,213	30	108,430	53	35,785	59	33.0	78
Valders (k-4)	24.0	26	4,307	90	103,540	67	33,695	79	32.5	79
Waunakee (k-5)	22.6	54	4,850	49	109,610	50	35,356	64	32.3	80

School District (grades)	Pupils Per Classroom		Expenditures Per				Teacher's Compensation			
	Number	Rank	Pupil Amount	Rank	Classroom Amount	Rank	Amount	Rank	% Classroom \$	Rank
Turtle Lake (k-8)*	21.2	76	\$4,954	40	\$104,777	65	\$33,848	78	32.3	81
Alma Center (k-6)	19.0	101	5,065	36	96,235	82	30,977	100	32.2	82
Luck (k-6)	23.4	40	4,603	66	107,802	55	33,961	76	31.5	83
Wild Rose (k-6)	20.9	79	4,566	70	95,566	85	30,065	103	31.5	84
Wautoma (k-8)	23.3	42	4,415	78	102,870	70	32,077	94	31.2	85
Milwaukee (k-8)	25.9	10	5,533	19	143,139	5	42,951	12	30.0	86
River Falls (k-5)	23.7	32	4,916	43	116,706	29	34,977	67	30.0	87
Prairie du Chien (k-6)	25.0	16	4,378	83	109,450	51	32,672	90	29.9	88
Osceola (k-4)	26.7	6	4,661	61	124,402	20	37,061	47	29.8	89
Fall River (k-6)	20.0	89	5,762	8	115,413	35	34,089	74	29.5	90
Platteville (k-4)	21.8	69	5,309	25	115,630	32	34,076	75	29.5	91
Merrill (k-6)	29.4	2	4,460	75	131,258	13	38,587	33	29.4	92
Rosendale (k-5)	23.2	44	5,122	32	118,728	25	34,475	71	29.0	93
Abbotsford (k-5)	23.8	31	4,721	58	112,360	39	32,352	91	28.8	94
Germantown (k-5)	26.5	8	5,651	12	149,921	3	42,439	14	28.3	95
Siren (k-5)	22.2	63	5,334	24	118,201	27	33,401	83	28.3	96
Merton J8 (k-8)*	25.7	11	5,231	27	134,437	9	37,958	41	28.2	97
Parkview (k-6)	22.9	50	5,071	35	116,227	30	31,779	97	27.3	98
Marathon City (k-12 Bld)	28.2	3	4,643	63	130,840	14	34,811	69	26.6	99
Stoughton (k-5)	27.5	4	4,935	41	135,466	7	35,803	58	26.4	100
Rio (k-6)	23.0	47	5,034	37	115,782	31	29,868	104	25.8	101
Lancaster (k-4)	22.9	51	5,349	23	122,385	23	30,477	101	24.9	102
Solon Springs (k-6)	23.5	38	4,975	38	116,863	28	28,826	106	24.7	103
Clayton (k-8)	22.9	49	4,831	53	110,823	45	27,015	109	24.4	104
New Auburn (k-6)	24.2	25	5,435	20	131,581	11	31,022	99	23.6	105
Rolph (k-5)	26.4	9	5,098	33	134,689	8	30,431	102	22.6	106
Wauzeka (k-6)	18.6	104	5,235	26	97,319	78	21,976	110	22.6	107
New Lisbon (k-6)	30.2	1	4,856	47	146,797	4	32,793	89	22.3	108
Menominee Indian (k-3)	19.5	96	7,745	1	150,640	2	33,438	82	22.2	109
Flambeau (k-6)	21.3	74	7,299	2	155,761	1	33,385	84	21.4	110
AVERAGE	22.4		\$4,856		\$108,892		\$36,512		33.5%	

* These districts operate grades Kindergarten to Eighth. They are all located in union high school districts.

The third column, expenditures per classroom, is simply a product of the first two columns (pupils / classroom X expenditures / pupil). Average pupils per classroom is multiplied by expenditures per pupil to create a dollar figure on total expenditures per average classroom in each district. This figure for each district is substantially correct. The one error which may appear in it is that the expenditure per pupil is computed on grades k-12, not just on the elementary grades which are the focus of this study. We do not know, but we presume that elementary school children cost less to educate than high school students. Data are not currently available in Wisconsin to determine this.

The fourth column, average teacher compensation, is a figure which represents total salary and all additional fringe benefit expenditures (for example, Social Security, health care insurance, retirement, and disability insurance) in teachers' compensation packages. The figure is taken from data provided by the Wisconsin Association of School Boards.(4) The Association monitors the state's 431 districts and records the results of all teacher contracts. The average teacher compensation figure is calculated by the School Boards Association by dividing the total volume of the compensation by the total number of full time equivalent teachers.

The fifth column, teacher compensation as a percentage of classroom expenditure, is calculated by dividing average teacher compensation by average total expenditure per classroom. The result reflects what proportion of the money spent in a district's average classroom goes directly to the classroom teacher. This is one clear measure of where school districts are spending their monies.

GEOGRAPHIC REPRESENTATION

Enough complete responses to our survey were received from 110 districts or approximately one-quarter of the districts in the state. Map 1 shows the geographic distribution of these 110 districts. They are located in 66 of Wisconsin's 72 counties, providing broad geographic coverage. The districts range in size from the largest, Milwaukee, to some of the smallest, Fall River and Weyerhaeuser. They appear to be a representative sample of districts in the state. The districts on the map are shaded according to the percentage of classroom spending allocated to the average teacher's compensation package. The distribution of the percentage groupings, 29.99 and lower, 30 to 34.9, 35.0 to 39.9, and 40.0 and above, show no apparent geographic concentration.

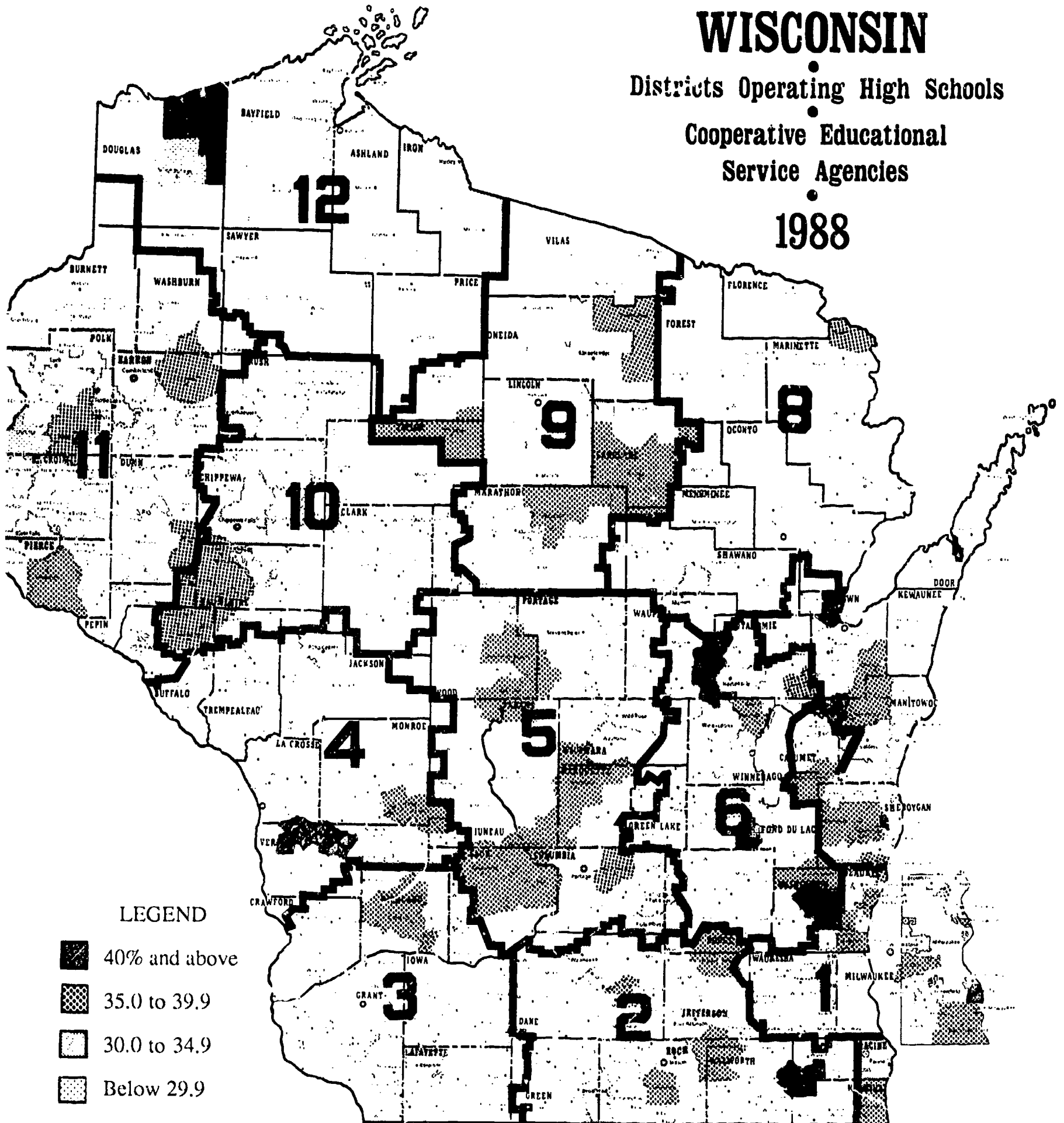
MAP I

TEACHER COMPENSATION AS A PERCENTAGE
OF CLASSROOM EXPENDITURES
(Sample of 110 Wisconsin School Districts)
1987-88 School Year

WISCONSIN

Districts Operating High Schools
Cooperative Educational
Service Agencies

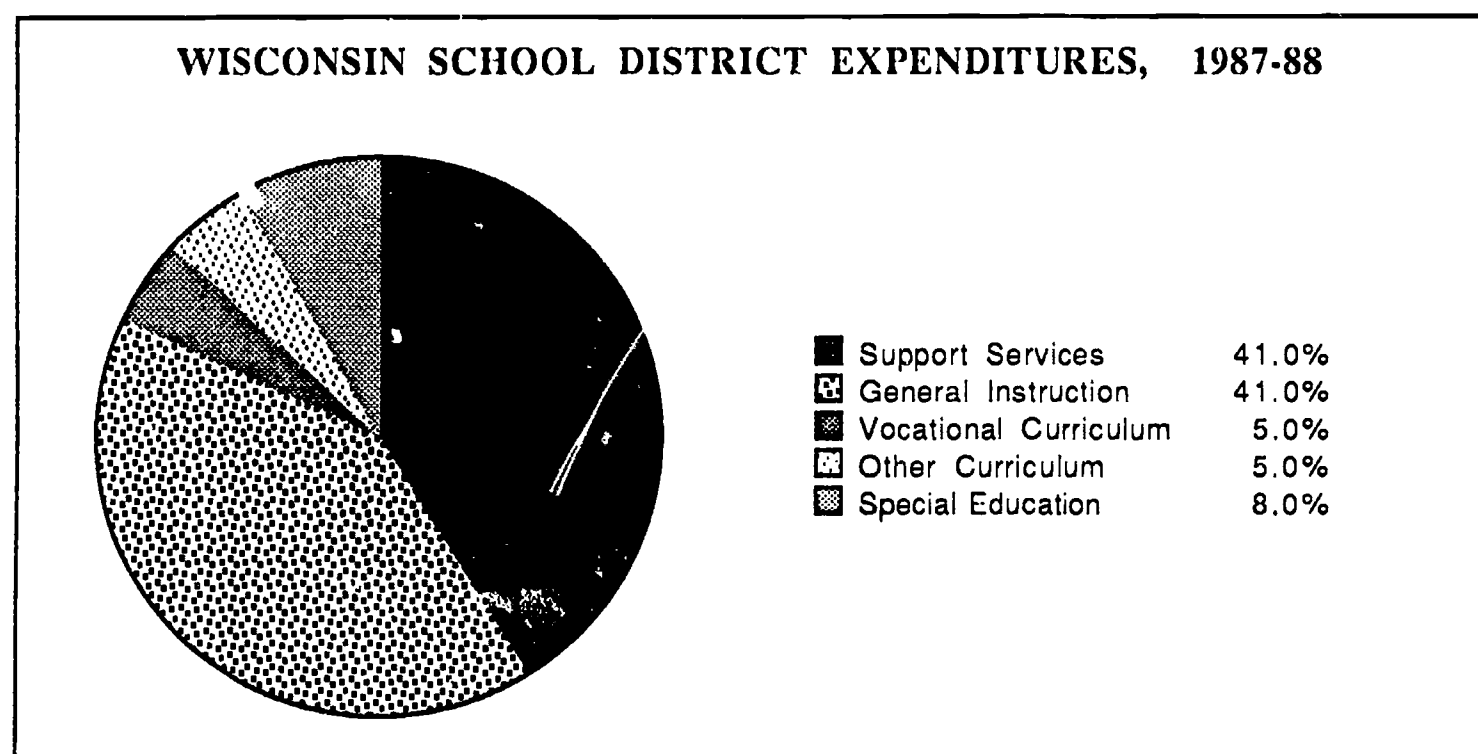
1988



COST PER PUPIL

School districts in Wisconsin spent over \$3.5 billion to educate the 735,467 pupils (two kindergarten students count as one full time student) enrolled in the 1987-88 school year. (5) That equates to an average per-pupil expenditure of \$4,831. The average for the 110 districts in the survey is a very similar \$4,856. The per-pupil costs in the sample districts range from \$3,230 to \$7,745. This range is within the range seen for all of the state's 431 school districts. (6)

In the 1987-88 school year Wisconsin's 431 school districts budgeted \$2.1 billion for instructional spending, or 59% of total expenditures. Instructional spending is further divided into four categories. General curriculum makes up the largest portion with \$1.5 billion, or 41% of the total. The other categories of expenditures are: special education, \$305 million or 8%; vocational, \$167 million or 5%; and other curriculum, \$168 million, also 5%. (7) Other curriculum includes physical education, health, driver's education, and co-educational clubs and activities such as band, sports, or social groups.



Source: Wisconsin Policy Research Institute Graph based on Department of Public Instruction data.

Support services in 1987-88 were budgeted at \$1.4 billion, or 41% of the total \$3.5 billion in spending. Support services include the costs of operating and maintaining the physical plant at 10.0% of total spending, debt service at 3.2%, food services at 3.1%, transportation at 5.1%, and district and school building administration at 6.8% (8).

PUPILS PER CLASSROOM

The number of pupils in a typical elementary school classroom varied across districts in the sample from 13.4 for Weyerhaeuser to 30.2 for New Lisbon, with an average of 22.4. That there is a range was not unexpected, since similar variation is seen when a simple pupil-teacher ratio comparison is made. For example, the same two extreme districts noted above have a ratio of pupils to teachers of 11.6:1 and 16.3:1, respectively. The full range for the pupil-teacher ratio for

the state's 431 school districts is from less than ten to the low twenties or more than twice that found in the 110 district sample. (9) This implies that the number of pupils per classroom in the state may vary even more widely than in our sample.

COST PER CLASSROOM

Average classroom expenditures per district in our sample range from \$77,400 to \$155,761. These figures are constructed by multiplying average classroom size by per-pupil expenditure levels. The average for the 110 districts in the survey is \$108,892. Milwaukee School District, for example, showed a classroom expenditure level of \$143,139, ranking it fifth highest. Kenosha ranked 43rd at \$111,210, and Rib Lake, 110th at \$77,400.

Care should be exercised in viewing the cost-per-classroom figure as a precise measure of a school district's actual classroom expenditure level. The figure is a product of district averages to provide a common point of comparison. Variations within a district are very possible, given differing school buildings, varying compensation levels for teachers by building, differing numbers of pupils per building within a district, or the nature of classes being taught. In the Shorewood School District, for example, there are two elementary schools. In the Atwater and Lake Bluff elementary school buildings the following staff were reported to the Department of Public Instruction:

FTE PROFESSIONAL STAFF

<u>Position</u>	<u>Atwater</u>	<u>Lake Bluff</u>
Principal	1	1
Librarian	1	1
Teachers:		
Special Ed.	3.5	2.6
Regular	25.6	26.0
Counselor	1	-
Admin. Pupil Ser.	<u>.5</u>	<u>-</u>
Total	32.6	30.6

The number of pupils in each school building reported in the survey were Atwater with 481.5 ($k = 1/2$) and Lake Bluff with 459. Both the Atwater and Lake Bluff schools report operating 22 classrooms in the survey. This leaves an average classroom size of 20.9 for Lake Bluff and 21.9 for Atwater. (10)

The average years of teaching experience for the Atwater School staff is 16.1 years, while for the Lake Bluff School staff it is 18.7 years. Total compensation for the 29.1 teachers in the Atwater School is approximately \$1,227,000, while total compensation for the Lake Bluff School teachers is \$1,201,000. These compensation figures include salary and all fringe benefits. The average teacher's total compensation (per FTE position) is \$42,165 for the Atwater School and \$41,999 for the Lake Bluff School. The salary portion of total compensation for the Atwater School is \$32,555. The salary portion for the Lake Bluff School is \$32,458. (11) These minor differences between the two compensation amounts is not unexpected. The average years of experience seen in each building is sufficient for most teachers to have reached the top of the salary schedule. This is an example of the widely cited concern that salary schedules have been compressed over the last decade as the number of new teachers who enter the profession has decreased and stabilized.

TEACHER COMPENSATION

The average school district teacher compensation is a product of negotiation between the district and the local teacher's union under the state-imposed mediation arbitration law. The range in the teacher's compensation is from \$21,976 to \$45,763 for the 110 districts in the survey who have settled 1987-88 school year contracts. The average for the 110 districts is \$36,512. A number of districts in the Milwaukee area, such as West Allis, Menomonee Falls, Mequon, Wauwatosa, Fox Point, and Glendale rank in the top ten in terms of average teacher compensation. But as will be seen below, this often has little bearing on the ratio of teacher compensation to classroom cost. What is remarkable is the range of compensation in the sample. The highest paid teachers in the state receive more than twice what the lowest paid teachers receive. Housing costs do vary, but they are not sufficient to account for such a disparity. Other factors may play a role, but what they are is not evident.

TEACHER COMPENSATION AS PERCENT OF CLASSROOM COST

The most important figure in the table is the last one, the percent of classroom cost that goes to teacher compensation. There is enormous variation across our sample. At the high end is West Bend where almost half of the classroom costs are allocated to the classroom teacher. At the low end is Flambeau where only one-fifth goes to the teacher. The average for the 110 districts in the sample is 33.5%. This figure is probably lower than most citizens would have guessed, given the common image of elementary school as a set of students with one teacher.

The burning question these figures raise is where does the rest of the money go? Some insight can be gained by examining such factors as classroom size, teacher compensation, or expenditures per pupil. In the case of the West Bend School District the driving factors are the low number of pupils in the average classroom, 19.0, and the very high average teacher's compensation package of \$41,179. With a difference of only \$130, the per pupil cost is extremely close to the average for the 110 districts. West Bend has made the decision to pay its teachers well and to have smaller classes. These two factors play a major role in the district's spending almost half of its classroom dollars on the classroom teacher.

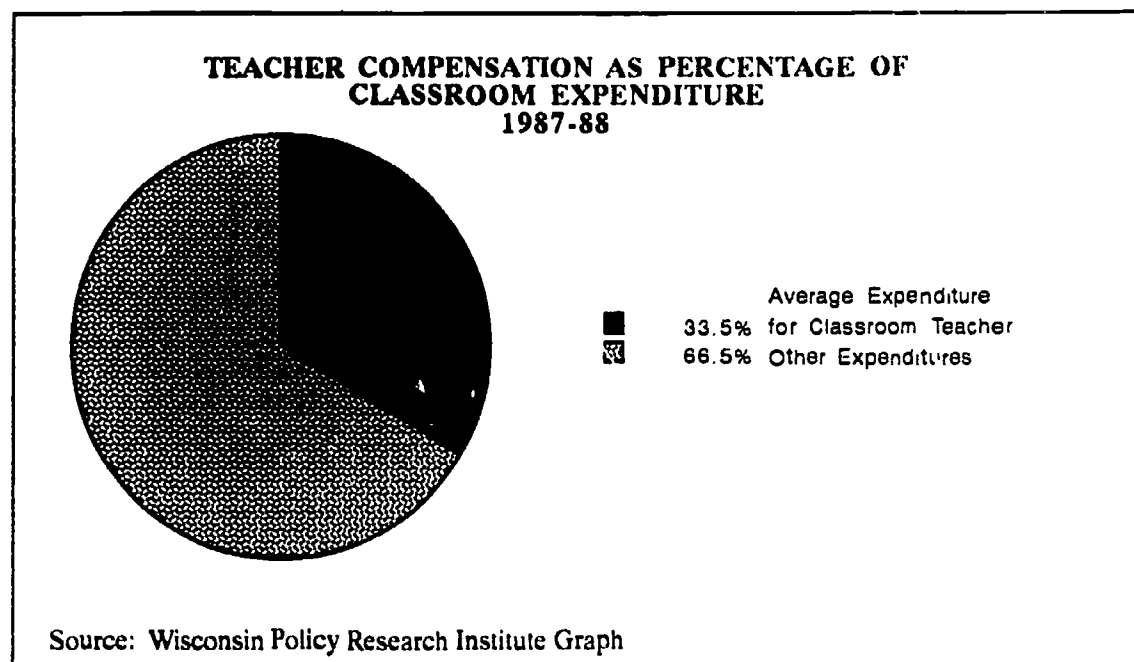
Brillion School District, by contrast, has made different decisions. Although it ranks right behind West Bend in percent of classroom expenditures going to the teacher and it, too, has a smaller number of pupils per classroom, it pays its teachers considerably less, some \$2,119 less than the sample average; and it spends considerably less overall on education. (Its per-pupil expenditure ranks it 108 out of 110 districts reporting.) The result is that a relatively high proportion, (44.3 percent,) of expenditures goes to the classroom teacher.

At the other end of the spectrum is the Flambeau School District with 21.4% of classroom spending going for teachers' compensation. The District pays its teachers less than most other districts, some \$3,127, on average. And it has smaller classes, averaging 21.3 pupils per classroom. These factors could offset one another. But the controlling factor is the per-pupil expenditure level. At \$7,299 per pupil, this level is the second highest in the 110 sample districts. When combined with relatively low teacher compensation, the result is just over one-fifth of the expenditures go to the classroom teacher. What is unknown, however, are the reasons for the high per-pupil expenditures, since it does not appear to be going to the teachers.

Another example is Milwaukee, where some 30 percent of the average classroom costs go to teacher compensation. The major cause for the lower than average percentage going to the classroom teacher despite higher teacher compensation and the higher expenditure per pupil is the higher-than-average class size. But again that may be only a partial explanation.

WHY THE VARIATION

Where do the other dollars go? There are several answers. One has to do with teachers and teacher contracts. It is normal for teacher contracts to provide for specific classroom preparatory time. A contract may call for a teacher to be present at the building for an hour prior and after the actual class is present. It may also call for a teacher to provide instruction during only four or five periods of a six-period day. This latter provision would have the impact of increasing the number of teachers within a school district to cover all classroom hours. There are also teachers who supplement the basic classroom teacher by offering such subjects as art, music, reading or physical education.



Another explanation involves the many other costs which are associated with running a school district: the costs of operating and maintaining the school building; school district and the individual building administration; food service; debt service costs; bus transportation; and other district educational services, such as special education. Some districts have more administrators and, therefore, higher costs. Other districts may have newer buildings or recently completed rehabilitation which have raised debt-service costs. Still others may serve a wider area with buses or provide more special classes.

The variation in per-pupil expenditure levels may also be attributed to district management decisions on such issues as actual pupil-teacher ratios in the classroom, degrees and years of teaching experience of the professional staff, and location and size of support staff. Other influential factors may be the demographics of a district's school age population, the number of children with "special" educational needs, desegregation, asbestos, court orders, interpretation of state mandates, and other similar factors.

STATE MANDATES

Many other factors which are not subject to local decisions also play a role in the differences among districts. These factors are attributable to state and federally-imposed mandates. A Legislative Fiscal Bureau study in 1988 notes 24 mandates placed on school districts for finance, 107 for areas of governance, organization and operations, and 24 for educational programming. In addition, there were 42 other requirements placed on districts in first class cities (re Milwaukee) and 18 provisions applicable to districts participating in voluntary programs. (12) Another 12

general governmental provisions were also noted to apply to school districts. These mandates are all of state origin.

To illustrate the point that many non-local factors also affect expenditure patterns, the following provides a list of state mandates relating to educational programs:

Local handicapped education programs must be approved by the DPI.

Districts create multidisciplinary teams to evaluate children with exceptional educational needs (EEN).

Districts must provide educational programs for children with EEN, age 3 or older.

Annual district plan to meet EEN must be submitted to DPI.

Districts must provide services to school-age parents.

English language instruction must be provided with use of native language to permit effective progress for Limited English Speaking pupils (LES).

Bilingual educational programs for LES pupils must be provided.

Districts must provide instruction in academic skills, vocational skills, citizenship and personal development.

Districts must employ a reading specialist and develop a reading program with appropriate goals.

Districts must require all instruction be in English except in specific circumstances.

Districts are required to identify children at risk and develop programs to retain pupils.

Gifted and talented educational programs are required.

Books and supplies must be provided to indigent children.

Districts must provide remedial reading for underachievers up to grade three, and five-year-old kindergarten is required.

Written sequential curriculum plans must be implemented.

For all grades regular instructional plans in specific areas are required.

Access to education is required for employment programs.

Districts must comply with high school graduation standards.

Districts must annually administer a standardized DPI reading test for grade three.

Districts must administer achievement tests for reading, language arts and math at least twice up to grade five and once in grades 9 to 11.

Built around these requirements are specific administrative rules and regulations placing specific educational requirements on local school districts. For example, under special education there are twenty-one individual reporting categories. In addition, other non-educational programming requirements may accompany the ones noted above. An example of this is the required annual census of non-English speaking children in a district to determine if certain criteria are met for Limited English Speaking programs to be required.

DIFFERING EXPENDITURE PATTERNS

A school district's educational program offering will also affect its per-pupil costs. For example, the data shown in the table reflect expenditures at the point at which they are finally made and students at the point the instruction is delivered. Many districts in Wisconsin, however, act as "magnets" for provision of specific services. These services tend to be of high cost and require specific pupil numbers to justify the expenditures or provide adequate programming.

In the area of special education several methods of providing the services are used by school districts. In 1988, for example, there were two counties which provided special education services to local school districts on a contract basis (not every district located in the county may participate). These counties were Marathon and Sheboygan. In these two cases the local school districts contract with the county for the provision of special educational services for students from their district. Fees paid by the participating school districts cover the actual costs incurred by the county program. The pupils are counted by the school district for aid purposes. The dollars spent by the district are shown in the data. The pupils, however, do not appear in the pupil count used in this effort. This, therefore, would cause a higher per-pupil expenditure.

Six other counties directly operate a handicapped education program for their participating school districts: Brown (the city of Green Bay school district operates its own program), Calumet, Manitowoc, Ozaukee, Racine (the city of Racine School District operates its own program), and Walworth. In these cases the county levies the property tax to support the educational program. These pupils and dollars are not shown in the data developed for this study. Since these districts do not supply this very costly educational service, their expenditures, both gross and per pupil, will be lower than those of other districts. As an example, the Manitowoc School District's 1987-88 per pupil school costs were the third lowest, \$4,001, of any district their size (2,500 to 4,999 pupils) as reported in Wisconsin School District Facts, 1988. (13) The data show an expenditure range for these districts of \$3,765 to \$6,273, with an average of \$4,722. Thus, the Manitowoc district compares favorably to its peers in terms of per-pupil expenditure levels on the surface. However, the comparison may not be accurate because of the local decision to provide special education programs through the county, and the cost of those programs is not reflected in the \$4,001 figure.

In other cases a district may act as a magnet for providing special educational services for themselves and neighboring school districts. In these cases the district's reported expenditures per pupil will be pushed higher as the special education program expands. In the districts whose pupils are being transferred into the program, the per-pupil cost should be lower.

CASE STUDIES

In order to gain further insight into some of the detailed expenditure differences among districts, two specific districts are examined. One is a suburban Milwaukee district, Shorewood. The second is a small rural district, Fall River.

School Districts: Shorewood

The Shorewood School District is located immediately north of the Milwaukee Metropolitan School District. In 1987, Shorewood reported 1,943 pupils. It also reported total expenditures of \$11,249,644 in its 1987 Annual Budget Report to the state Department of Public Instruction. The following table details the revenues and expenditures of the Shorewood School District from that report.

SHOREWOOD SCHOOL DISTRICT TOTAL EXPENDITURES 1987-88

	Revenue Source			Expenditure Area	
	Amount	Percent		Amount	Percent
Property Tax	\$8,541,884	76.7%	Instruction	\$6,315,231	56.1%
State Aids	1,903,950	17.1	(Special Ed)	(666,335)	(5.9)
General	(430,000)	(3.9)	Support Services	4,234,413	37.6
Handicapped	(348,700)	(3.1)	Instruc. Staff	(627,652)	(5.6)
Transportation	(0)	(0)	Administration	(1,059,121)	(9.4)
Integration	(1,100,000)	(9.9)	Oper & Maint	(1,630,130)	(14.5)
Other	(25,250)	(.1)	Pupil Transport	(116,150)	(1.0)
			Other	(801,360)	(7.1)
Federal Aids	90,000	.8	Debt Services	536,468	4.8
Other Revenues	605,937	5.4	Food Services	163,532	1.5
Total	\$11,141,771	100.0%	Total	\$11,249,644	100.0

If instruction and instructional staff expenses are combined, total instructional costs are 61.7% of the school expenditures. The second largest expenditure is for operation and maintenance, 14.5% of the total.

Per-pupil expenditures for the Shorewood School District for 1987 were \$5,734 based on data filed by the district with the DPI. The Public Expenditure Survey has reported on per-pupil expenditure levels for over five years. According to its authoritative report and a review of the data filed by the district with DPI, the following per-pupil expenditure amounts were reported for 1987.

Shorewood School District Per Pupil Expenditures 1987-88

<u>Expenditure Area</u>	<u>Amount</u>	<u>Percentage</u>
Instruction (Compensation)	\$ 3,181 (3,020)	55.5 (52.7)
Support Services (Oper & Maint)	2,553 (839)	44.5 (14.6)
(Pupil Transport)	(60)	(1.1)
(Instruct Support)	(323)	(5.6)
(Debt)	(380)	(6.6)
(Gen & Bldg Admin)	(458)	(8.1)
(Other)	(493)	(8.6)
Total	\$ 5,734	100.0%

The preceding per-pupil spending level, together with the gross dollar revenue and expenditure amounts, of the Shorewood School District give basic comparable information for the district. The data indicate that instructional services compensation accounts for 94.9% of all instructional costs (\$3,020/3,181). Instructional compensation would include salary and fringe benefit amounts for teachers and teacher aids. Instructional costs account for 55.5% of total per-pupil spending. Applying these same percentage relationships as seen in the preceding table to the per-classroom expenditure amount for the Shorewood district of \$122,708 yields the following data on a classroom basis.

<u>Expenditure Area</u>	<u>Amount</u>	<u>Percentage</u>
Instruction (Compensation)	\$68,103 (64,667)	55.5% (52.7)
Support Services (Oper & Maint)	54,360 (17,915)	44.5 (14.6)
(Pupil Transport)	(1,350)	(1.1)
(Instruct Support)	(6,872)	(5.6)
(Debt)	(8,099)	(6.6)
(Gen & Bld Admin)	(9,817)	(8.1)
(Other)	(10,553)	(8.6)
Total	\$122,708	100.0%

The resulting compensation figure for a typical classroom is \$64,667. The average teacher's compensation for the Shorewood School District is, however, \$42,938. The remaining instructional compensation amount is \$21,729. A portion of this is attributable to teachers' assistants within the district. The greater portion, however, is attributable to teachers' compensation for time outside the classroom.

Data filed by the district with the DPI show 57.7 teachers for the two elementary schools. The survey data indicate the district was operating 44 classrooms for the two elementary schools on average for each school day. This would indicate that there are 13.7 teachers outside the classroom

on average. Another way to look at these figures is the ratio of 1.3 teachers per classroom. Multiplying this figure times average teacher compensation (\$42,938) yields the fact that the combined teachers serving each classroom receive, on average, \$55,819 of the \$64,667 allocated for classroom compensation. It appears that teaching assistants receive the rest.

The Shorewood School District's elementary schools' staffing patterns include the following distribution of teachers and administrative personnel for its two elementary schools.

<u>Position</u>	<u>FTE Personnel</u>
Principal	2
Librarian	2
Teachers	57.7
(Special Ed.)	(6.1)
Counselor	1
Total	62.7

The school district's contract language with its teachers' union does not dictate a specific time period teachers must be in the school building. The language allows for variations in accordance with the educational responsibilities of the teacher. This pattern allows for a greater amount of flexibility in the scheduling of teachers' and students' time.

FALL RIVER

The Fall River School District is located to the northeast of Madison in Columbia and Dodge Counties. The District in 1987 reported 306 pupils. The district operates one school building. Total expenditures of \$1,718,304 were reported in the 1987 Annual Budget Report to the state Department of Public Instruction. The following table details the revenues and expenditures of the Fall River School District from that report.

Fall River School District Revenue and Expenditures 1987-88

<u>Revenue Source</u>			<u>Expenditure Area</u>		
	Amount	Percent		Amount	Percent
Property Tax	\$ 850,060	49.0%	Instruction	\$ 982,676	57.2%
State Aids:	671,407	38.7	(Special Ed)	(111,451)	(6.5)
General	(643,200)	(37.0)	Support Services	624,271	36.3
Handicapped	(11,287)	(.7)	Instruc Staff	(90,114)	(5.2)
Transportation	(8,400)	(.5)	Administration	(84,004)	(4.9)
Integration	(0)	(0)	Oper & Maint	(296,329)	(17.3)
Other	(8,520)	(.5)	Pupil Transport	(94,690)	(5.5)
Federal Aids	104,817	6.0	Other	(59,134)	(3.4)
Other Revenues	110,013	6.3	Debt Service	43,593	2.5
			Food Services	67,764	3.9
Total	\$1,736,297	100.0%	Total *	\$1,718,304	99.9%

*This does not equal 100% because of rounding error.

Expenditures per pupil for the Fall River School District for 1987 were \$5,762, only \$28 higher than those for the much larger Shorewood School District, based on data filed by the district with the DPI. According to the Public Expenditure Survey's report, Wisconsin School Districts Facts, 1988 and a review of the data filed by the district with DPI, the following per-pupil expenditure amounts were reported for 1987.

Fall River School District Per-Pupil Expenditures 1987-88

<u>Expenditure Area</u>	<u>Amount</u>	<u>Percentage</u>
Instruction	\$ 3,358	58.3%
(Compensation)	(2,786)	(48.4)
Support Services	2,404	41.7
(Oper & Maint)	(696)	(12.1)
(Pupil Transport)	(309)	(5.4)
(Instruct Support)	(294)	(5.1)
(Debt)	(143)	(2.5)
(Gen & Bldg Admin)	(503)	(8.7)
(Other)	(459)	(7.9)
Total	\$ 5,762	100.0%

The preceding per-pupil spending level together with the gross dollar revenue and expenditure amounts of the Fall River School District give basic comparable information for the district. The data indicate that instructional services compensation accounts for 83.0% of all instructional costs. Instructional compensation would include salary and fringe benefits amounts for teachers and teacher aids. Instructional costs account for 58.3% of total per-pupil spending. Applying the same percentage relationships as seen in the preceding table to the per-classroom expenditure amount for the Fall River district (\$115,413) yields the following data on a classroom basis.

Fall River Classroom Expenditures, 1987-88

<u>Expenditure Area</u>	<u>Amount</u>	<u>Percentage</u>
Instruction	\$67,286	58.3%
(Compensation)	(55,860)	(48.4)
Support Services	48,127	41.7
(Oper & Maint)	(13,965)	(12.1)
(Pupil Transport)	(6,232)	(5.4)
(Instruct Support)	(5,886)	(5.1)
(Debt)	(2,885)	(2.5)
(Gen & Bld Oper)	(10,041)	(8.7)
(Other)	(9,118)	(7.9)
Total	\$115,413	100.0%

The resulting compensation figure for a typical classroom is \$55,860. The Fall River School District's average teachers' compensation is \$34,977 for 1987-88. The remaining instructional compensation is \$20,883. The question of where these remaining dollars go is not answerable with the available data. The total is slightly smaller than the figure of \$21,729 found in Shorewood. It may be that there are more teachers than classrooms, but given the small size of the

district and the cross-over among grades by teachers, the exact use of all instructional dollars is not determinable from existing figures. We do know that the district was operating 7.7 elementary classrooms. But we do not know how many elementary school teachers there were.

The Fall River School district's school (k-12) staffing patterns include the following distribution of teachers and administrative personnel:

<u>Position</u>	<u>FTE Personnel</u>
Principal	.5
Librarian	.2
Teachers	13.59
(Special Ed.)	(2.73)
Counselor	.1
Total	14.39

The point that these data on Fall River and those on Shorewood are supposed to make is that districts do spend money differently, even though they are responding to numerous similar mandates. But what is not known is why their expenditure patterns are different and whether any particular pattern is actually superior. Current data do not even allow the calculation of the simple measure of what percentage of classroom expenditure goes to the classroom teacher.

If citizens and school board members are to be able to make more informed decisions on education expenditures, then a revised reporting form should be developed and administered by the DPI which would give more meaningful insight into where dollars are really going and why they are being spent in that fashion. Ideally citizens would also be able to learn just what is being achieved with the specific expenditure as well. That is step two. Step one is more immediate. Citizens should know specifically where their tax dollars are going.

NOTE: The Institute wishes to acknowledge the cooperation of the Department of Public Instruction, the Wisconsin Association of School Boards, and the administrative staffs of the Shorewood and Fall River School Districts. Their assistance and provision of data was crucial to the development of the report, particularly in the design and testing of the survey instrument, development of the data base, and review of the progress of the project.

APPENDIX I

Survey Instrument (Technical Note)

The actual survey instrument can be seen on the following pages. It was designed to collect data to allow for the calculation of the number of classrooms in operation on a typical school day for each responding school building. The basis for the calculation is the number of time blocks in a given building multiplied by length of time for each block. These resulting figures are then totaled and divided by the number of time blocks in a typical school day. The results give the number of classrooms in operation for the school. The following is an example of how one school building responded to the survey and the resulting figures for the building.

This is the reporting form from the Shorewood School District.

Grade	Time Blocks								3rd Fri. September Enrollment	
	1/2	1	2	3	4	5	6	7		8
K4				4						82
K				4						82
1							3			60
2							3			65
3							3			56
4		6			3					69
5		6			3					66
6		9		3						62
7										
8										
9										
10										
11										
12										
Un- graded										

In this example, from the Shorewood School District, the elementary school building has classes from pre-kindergarten (k4) to sixth grade (6) with a total of 460 full time equivalent pupils (pre-kindergarten and kindergarten are counted as half since they attend a half day of school). The typical school day has six periods or time blocks. The building operates four units of pre-kindergarten and kindergarten for three time blocks (half of a typical school day). In the case of first to third grades this building has three time blocks of six hours each for each grade level. In the fourth to sixth grades variable length time blocks become a factor in the educational schedule for the children. In this case fourth and fifth grades each have six one-hour blocks and three four-hour blocks of instructional time. The sixth grade has nine one-hour blocks and three two-hour blocks.

In order to determine the average number of classrooms for the building for a typical school day, the number of time blocks noted in each time column are multiplied by the length of time of the block. For example, in the one-hour time block twenty-one one-hour classes are reported; six for fourth grade, six for fifth, and nine for sixth. The twenty-one is multiplied by one. In each of the following columns the same procedure is followed. The three-hour time block column shows eleven classes with a result of thirty-three. The grand total for this example is 132 hours of class in a typical school day for this building. The building reports a school day length of six time blocks. The six is divided into the 132 hours to yield twenty-two classes in operation for the typical school day. Given the 460 pupils reported for the school building, the average number of pupils in a typical classroom would be 20.9.

Data Collection Technical Note

The original survey instrument was sent to all school buildings in the state, including middle and high schools. This study examines only elementary school data. During the process of examining data returned by participating school buildings and following data entry, several problems developed. In the case of middle schools it was evident that a sufficient sample was not returned to make the data sufficiently representative for inclusion in this study. In the case of high school data the number of buildings responding was also quite low. However, the data also showed an extreme variation in the average class size between districts. Efforts made to identify reasons for these variations indicate that in the data collection process a distinction should have been made for study halls. In the case of larger school districts study hall size was extremely large. This was sufficient in a number of cases to drive the average class size to an extreme. Conversely, in smaller districts classes are given with as few as two or three pupils. Future research efforts should attempt to isolate these data anomalies from driving the data ranges to extremes.

FOOTNOTES

- (1) Wisconsin Expenditure Commission, unpublished Working papers of the Commission, data based on U.S. Bureau of the Census, Census of Government data, 1986.
- (2) Department of Public Instruction, Division of Management and Budget, interview with staff, based on data filed by the states 431 school districts, 1988.
- (3) Department of Public Instruction, computer printout for the Wisconsin Policy Research Institute, 1988.
- (4) Wisconsin Association of School Boards, unpublished annual survey of school district compensation based on data provided by local districts, 1988.
- (5) See note 3.
- (6) See note 3.
- (7) Department of Public Instruction, Division of Management and Budget; telephone interview, data based on reports filed by state's 431 local school districts, 1988.
- (8) See note 6.
- (9) Department of Public Instruction, pupil-teacher ratio calculations based on data filed by the state's 431 school districts, 1988.
- (10) Calculations based on survey data from Shorewood School District, 1988.
- (11) Calculations based on data filed with the Department of Public Instruction by the Shorewood School District.
- (12) Wisconsin Legislative Fiscal Bureau report per Department of Public Instruction, Division of Management and Budget memo, August 15, 1988.
- (13) Public Expenditure Survey, Wisconsin School District Facts, 1988, (Madison, WI, 1988).

Wisconsin Policy Research Institute

The Wisconsin Policy Research Institute is conducting this research effort with the full cooperation and support of the Wisconsin Department of Public Instruction and the Wisconsin Association of School Boards. The published results will be available later this year. If you have questions concerning this questionnaire contact Richard Rue at the Wisconsin Policy Research Institute, (414) 963-0600.

Please return this form to the Wisconsin Policy Research Institute, 3107 North Shepard Avenue, Milwaukee, Wisconsin 53211.

School District: _____
School Building: _____
Principal : _____
(or person completing this form) Phone: () - _____

What is the normal school day length? _____Hours & _____Minutes

How many time blocks occur in a school day? _____

How long is each time block used for scheduling purposes? _____

____Check this line if your school uses a flexible modular system of scheduling or some other system not compatible with the following chart. Please complete the student number portion of each chart.

To complete the charts on the last two pages of this questionnaire please reference the following example chart.

Sample Questionnaire

The following example assumes a six-hour school day with time periods of 60 minutes each.

Kindergarten

A school with 2 sections of half-day kindergarten would place a 2 on the K row in the column for 3 time blocks. There are 28 children in one class and 26 in a second. The total of 54 would be entered in the enrollment column.

Fourth Grade

In this example each of the two fourth grade classes have a base classroom where they receive 4 periods of instruction. For the special sections such as math, art and science they have 2 one hour periods. Together these six periods make up a single school day.

Sixth Grade

A school with 2 sixth grade classes with 3 hours each followed by 3 one hour sections for each of the 2 classes would enter on the row for grade 6, a 2 in the three-hour column and a 6 in the one-hour column. The total number of sixth grade children, 50, is entered in the enrollment column.

High School

In this high school example there are 210 pupils in the 12th grade class. In a high school or middle school building each section of class would be counted separately. For example, if there were four sections of 12th grade english of one hour, each would be counted separately. In this example there are 56 one hour sections or classes in a typical school day and 16 two hour classes for the 210 pupils in the 12th grade. Study hall periods and independent studies would also be counted since they are a part of the school day.

SAMPLE CHART

Grade	Time Blocks (in hours)									3rd Fri. September Enrollment
	1/2	1	2	3	4	5	6	7	8	
K4										
K				2						54
1							2			55
2							2			48
3							2			43
4		4			2					51
5		4			2					47
6		6		2						50
7		5	2	1						49
8		6	1	1						43
9		44	10							168
10		38	14							175
11		41	12							193
12		56	16							210
Un- graded										

Contained Classrooms

	# Classrooms	# Hours	# Pupils
ED	1	6	3
LD	2	6	5
EMR			
TMR			

A school with 3 ED pupils for 6 hours in one classroom would place a 1 in the classroom column opposite ED, a 6 in the # Hours column and a 3 in the pupils column.

Please complete the following chart for the 1986-87 school year.

Grade	Time Blocks (in hours)									3rd Fri. September Enrollment
	1/2	1	2	3	4	5	6	7	8	
K4										
K										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
Un- graded										

Self-contained Classrooms

	# Classrooms	# Hours	# Pupils
ED			
LD			
EMR			
TMR			

If you have questions on how to complete this chart please call Richard Rue at Wisconsin Policy Research Institute (414) 963 - 0600.

Please complete the following chart for the 1987-88 school year.

Grade	Time Blocks								3rd Fri. September Enrollment
	1/2	1	2	3	4	5	6	7	8
K4									
K									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
Un- graded									

Self-contained Classrooms

	# Classrooms	# Hours	# Pupils
ED			
LD			
EMR			
TMR			

If you have questions on how to complete this chart please call Richard Rue at Wisconsin Policy Research Institute (414) 963 - 0600.

ABOUT THE INSTITUTE

The Wisconsin Policy Research Institute is a not-for-profit institute established to study public policy issues affecting the state of Wisconsin.

Under the new federalism, government policy increasingly is made at the state and local level. These public policy decisions affect the lives of every citizen in the state of Wisconsin. Our goal is to provide nonpartisan research on key issues that affect citizens living in Wisconsin so that their elected representatives are able to make informed decisions to improve the quality of life and future of the State.

Our major priority is to improve the accountability of Wisconsin's government. State and local government must be responsive to the citizens of Wisconsin in terms of the programs they devise and the tax money they spend. Accountability should be made available in every major area to which Wisconsin devotes the public's funds.

The agenda for the Institute's activities will direct attention and resources to study the following issues: education; welfare and social services; criminal justice; taxes and spending; and economic development.

We believe that the views of the citizens of Wisconsin should guide the decisions of government officials. To help accomplish this, we will conduct semi-annual public opinion polls that are structured to enable the citizens of Wisconsin to inform government officials about how they view major statewide issues. These polls will be disseminated through the media and be made available to the general public and to the legislative and executive branches of State government. It is essential that elected officials remember that all the programs established and all the money spent comes from the citizens of the State of Wisconsin and is made available through their taxes. Public policy should reflect the real needs and concerns of all the citizens of Wisconsin and not those of specific special interest groups.